

S
351.84
G15

STATE OF MONTANA

STATE DOCUMENTS

MAY 22 1974

Office of the Governor

Government Operations Unit



Report :

The Feasibility of Creating
a Centralized Laundry for
the Department of Institutions

MONTANA STATE LIBRARY
930 East Lyndale Avenue
Helena, Montana 59601

Montana State Library



3 0864 1004 7745 7

State of Montana
Office of The Governor

Government Operations Unit
State Capitol - Helena, Montana - 59601
Tel. 406-449-3616

THOMAS L. JUDGE
GOVERNOR

RICHARD J. LLEWELLYN
DIRECTOR

January 14, 1974

Dear Legislators:

I am pleased to submit to you this report on the feasibility and cost efficiencies of various alternatives to meet the laundry needs of four institutions of the Department of Institutions. This report and its recommendations are focused upon bringing the most economical long-term solution to what may soon be a crisis situation. The estimates, evaluations, and conclusions are based upon data made available to us by the Department of Institutions, the Division of Architecture and Engineering, laundry equipment manufacturers, and representatives from the laundry profession in Montana.

The Government Operations Unit believes that the state can realize substantial cost savings if our recommendations are followed. My staff will be available if necessary to clarify or expand any aspects of this report.

We especially thank the Division of Architecture and Engineering for their assistance in projecting construction and equipment costs and we thank the Department of Institutions for their cooperation.

Sincerely,



RICHARD J. LLEWELLYN
Director

RJL:cwo

T A B L E O F C O N T E N T S

	<u>Page</u>
Introduction	1
Section One	
Analysis of the Need for a Modern Laundry System	3
Section Two	
Analysis of the Alternatives	6
Section Three	
Analysis of the Costs of a Centralized Laundry System	8
Section Four	
Recommendations	17
Appendix 1	20

The preparation of this study was financed in part by the Community Planning Grant from the Department of Housing and Urban Development, under the provisions of Section 701 of the Housing Act of 1954, as amended.

REPORT ON THE FEASIBILITY
OF CONSTRUCTING A CENTRALIZED
LAUNDRY SYSTEM

PREPARED BY
THE GOVERNMENT OPERATIONS UNIT

JANUARY 14, 1974

INTRODUCTION

From the period of July through October of 1973, the Government Operations Unit conducted a study of the Boulder River School and Hospital of the Department of Institutions. After reviewing its operations and facilities, it was reported that the laundry building and equipment at Boulder were deteriorated beyond repair.^{1/} An appropriation of \$75,000 for renovation purposes was obviously inadequate to provide more than a temporary solution to a problem which demanded more serious consideration. Further investigation disclosed that the laundry at the Warm Springs Hospital was also delapidated, taking into consideration the building and the equipment. Both laundries were facing unfavorable review by the Department of Health and Environmental Sciences if not brought up to standards.

The inefficiencies of the current operations were numerous. Between these two institutions, there are 5 million pounds of laundry being done yearly. Another 1,000,000 pounds must be considered when including the Galen State Hospital and the State Prison. A centralized laundry was proposed as a more economical solution to the problems than building separate new facilities. This report includes several cost projections and analyses which support this proposal.

No reduction in total jobs is anticipated at these institutions due to the expected demand for laundry labor at the new facility, if constructed. There are other positions already available at the institutions for those who wish to remain employed there.

^{1/}Report on the Boulder River School and Hospital, Government Operations Unit, October 1973.

After collecting data from these laundries, studying the Kramer Report^{2/} for substantive information, and meeting with laundry representatives from the private sector, it appeared as though the only options open to the department were constructing and managing an efficient laundry operation or contracting for services. Therefore, this feasibility study was initiated.

^{2/}Kramer Report--A report prepared by the Victor Kramer Co. (laundry-linen consultants) from New York for the Department of Institutions in 1968. The study contained reports on centralization and included the Warm Springs State Hospital, the Galen State Hospital, and the Montana State Prison.

SECTION ONE

ANALYSIS OF THE NEED FOR A MODERN LAUNDRY SYSTEM

The Department of Institutions is currently facing a crisis involving the need for improving the present department-wide laundry system. The laundries that are presently operating at Boulder and Warm Springs must meet Medicare/Medicaid standards if the hospitals are to retain their certification. Without this certification, neither Warm Springs nor Boulder will be able to collect Medicare/Medicaid reimbursements, which are presently estimated at \$2,000,000 to \$3,000,000 per year.

Boulder and Warm Springs are in critical need of new or renovated facilities and new, efficient equipment. The laundry at Galen operates adequately with old equipment^{3/} which is in good to fair condition. However, the Kramer report shows that this laundry is the most inefficient because of high operating costs. The cost per pound in 1968 was 17¢; with the subsequent escalation of costs caused by the inflationary spiral, today's cost per pound is undoubtedly much higher.

The Montana State Prison will soon be replaced by a new facility. The architectural plans for the new state prison do not include space for a laundry facility. Besides the facts stated above, an improved laundry system is needed for these reasons:

1. Obsolescence

Present laundry equipment and laundry practices are obsolete at Warm Springs, Boulder, and Galen. The present equipment is 10 to 25 years old and in extremely poor condition. The laundry process is bottlenecked due to the lack of proper equipment. As a result, laundry output is low.

^{3/}The inventory records at Galen do not include the laundry equipment, but it is estimated to have been in use for 25 years.

Preventive maintenance has been and is neglected, which is largely the result of understaffing in the maintenance department.^{4/} Currently, an excessive number of employees is necessitated to make up for the inadequacies of the equipment. The present laundries were designed for cotton fabrics and cannot handle the newer materials. Cotton fabrics will be unavailable in the near future.

2. Health Hazards

The Hospital and Medical Facilities Divisions of the Department of Health and Environmental Sciences has stated that both the Warm Springs State Hospital and the Boulder River School and Hospital are inadequate. Neither laundry meets health standards because of insufficient separation of soiled and clean laundry. A separation had been constructed at Warm Springs. This stopgap construction proved to be infeasible because the separation also prevented ventilation necessary for personal comfort and tolerable working conditions. Nothing further has been done to correct these situations until recently, at Boulder, where a floor-to-ceiling separation will be raised in the near future. Present temperatures of the water are too low to kill the germs which can infect the laborers and patients. New boilers with higher water temperatures would remedy this problem.

3. Management and Personnel

Presently, laundry managers are not held responsible for laundry costs. Many of the costs are hidden or blurred within the institutions' complex budgeting. The department is unable to specifically identify costs in many areas.

^{4/}The report on the Boulder River School and Hospital described the effects of an inadequate preventive maintenance program.

For example, all institutional laundries are using unpaid patient^{5/} or prisoner help, and it is doubtful that the practice of utilizing unpaid patient help can continue. Unpaid help has been the subject of a considerable amount of recent class action litigation, and both federal and state courts have been nearly unanimous in holding that patients must be paid. A Federal District Court for the District of Columbia has recently ordered the U. S. Department of Labor to begin enforcing the Fair Labor Standards Act as it affects working residents in non-federal institutions for the mentally ill and mentally retarded. If this decision is appealed and affirmed on appeal as expected, patient help will cost the department as much as \$125,000 per year at the Warm Springs laundry facility alone, based on the number of patients now working there. If this decision is appealed, the state may have some time to get prepared for paid patient labor; if not, time has already run out.

4. Automation

The present laundries are labor-intensive operations. In the future, labor costs will accelerate. In order to control these costs, an automated laundry system is needed now. Any replacement facility constructed should be automated.

^{5/}At Warm Springs State Hospital, patients receive \$1 - \$5 per month in coupons to be used at the canteen for work which they have done during that month.

SECTION TWO
ANALYSIS OF THE ALTERNATIVES

Based on the current situation, we have considered possible courses of action. The alternatives are limited to the following:

- (1) Do nothing;
- (2) Continue a fragmented approach;
- (3) Consolidate the system;
- (4) Contract for services.

--DO NOTHING

This alternative should be quickly discarded because inaction at this time will:

- (a) Cost the state \$2,000,000 to \$3,000,000 a year--(loss of Medicaid/Medicare reimbursement);
- (b) Leave the Boulder River School and Hospital and the Warm Springs State Hospital without clean laundry;
- (c) Require the replacement of facilities and equipment at Boulder and Warm Springs in the near future anyway.

--FRAGMENTED APPROACH

The fragmented approach is the approach historically followed by the state. Equipment is added on a "as-needed" basis, often after taxing ancient equipment to its limit. For example, the Department of Institutions recently purchased twelve pieces of used laundry equipment for \$1,200 to replace a portion of the deteriorated machinery at Boulder. We believe it was a wise choice under these difficult circumstances. Again, as stated in the Boulder report, insufficient preventive maintenance has resulted in the premature

breakdown of equipment. Even with proper equipment and good buildings, labor costs will financially strain the state if this fragmented approach is continued.

--CONSOLIDATION APPROACH

A crisis will always exist in the handling of the institutions' laundry load. The crisis centers around the incontinent and tubercular laundry. If not properly handled and cleaned, it can be the cause of epidemic diseases. This laundry consists of flatwork, mostly sheets and bed clothing. Boulder River, Warm Springs, and Galen have 90% of this load. The amount of laundry at Boulder and Warm Springs is 10 times greater than that of Galen.

The objective of this approach is to design a system capable of handling this load at the least possible cost. This can be achieved through a centralized facility. These costs have been analyzed in section three of this report.

--CONTRACT FOR SERVICES

This alternative has been explored by contacting experienced laundry owners and managers in private businesses in Montana and discussing the possibilities of contracting for laundry services. Cost projections for this alternative (which are discussed in the following section) are reasonably representative of what would be finally decided under the state bid process if contracts were entered into for these services.

SECTION THREE

ANALYSIS OF THE COSTS OF A CENTRALIZED LAUNDRY SYSTEM

The state must choose between many alternatives in their selection of the most efficient laundry system, including the best location for the facility and the combination of factors which will provide maximum service at minimum costs. Obviously, the state has only two choices if it is to minimize expenditures, maximize efficiencies, and prevent the loss of substantial reimbursements.

- (1) Build its own facility and purchase equipment; or
- (2) Contract with the private sector for services.

In November 1973, the Department of Institutions received two proposals from interested communities. The Butte Local Development Corporation offered to provide the state with a three-acre site in the Industrial Park in Butte at no cost. This site is levelled and has all utilities underground, including electric, natural gas, water, and sewer. If desired, the Corporation has also offered to build the facility and lease it to the Department for approximately \$23,000 per year. This appears to be a very tempting and economical offer. However, if state equipment were to be installed in a facility which was not state-owned, the lessor would have a definite advantage in renegotiating the amount of the lease.

In the second of these proposals, the Deer Lodge County Planning Board requested that Deer Lodge County be considered as the site of the new laundry facility. The Planning Board also proposed that, if the state wishes to contract for these services, such a facility can be constructed in Deer Lodge County that would provide the necessary service to all state institutions

in the area. In either case, the state will be able to secure land from these communities

Before comparing the costs of these alternatives, the following cost analysis has been made.

Capital Costs Under the Fragmented Approach

The architecture and Engineering Division of the Department of Administration has estimated the cost of a laundry at Boulder which will satisfy the Hospital and Medical Facilities would range from \$75,000 to \$100,000. This would satisfy current but not future requirements, because this estimate is based only on partial equipment replacement. The remaining equipment is generally in poor condition and would require replacement in the near future (four years or less). This replacement would cost from \$100,000 to \$200,000. The building is 10 to 12 years old and in sound condition.

An alternative under this approach would be to design and construct, at this time, a fully-automated system at Boulder which would be able to handle the load for the next twenty years. Preliminary cost estimates range from \$100,000 to \$300,000, considering Boulder exclusively.

The situation is similar in the other institutions. Over the next four years, we estimate the total equipment replacement would be as high as \$700,000, identified as follows:

Boulder River School and Hospital	\$ 300,000
Warm Springs State Hospital (based on same magnitude of load as Boulder and general condition of major laundry equipment)	300,000
Galen Hospital (with partial equipment replacement in the future)	<u>100,000</u>
	<u>\$ 700,000</u>

This figure does not include any costs of renovating the facilities, securing the adequate labor force, or maintaining a separate cost center for laundry

costs. It is difficult to determine the remaining life in this old machinery, but we do realize that it is outdated and inefficient and would have to be replaced.

Labor Cost:

We identified the present annual labor costs as follows:

<u>Place</u>	<u>Workers</u>	<u>Approximate Average Annual Salary</u>	<u>Total</u>
Boulder	15	\$ 6,000	\$ 90,000
Warm Springs	20	6,000	120,000
Galen	14	6,000	84,000
Prison	<u>2</u>	6,000	<u>12,000</u>
	<u>51</u>		<u>\$ 306,000</u>

This cost is grossly understated because this fragmented approach requires the services of at least 80 unpaid patients. If 80 patients^{6/} were paid the wages of a laundry worker, an additional \$166,400 in costs would have to be included. The true costs of this operation is now more obvious. It is extremely doubtful that the state is prepared to pay approximately \$472,400 per year in wages alone for laundry workers. If the U. S. Supreme Court rules that patients (not prisoners) of institutions must be paid at least the minimum wage, as it appears that it may, salaries alone would be too high to continue with the present laundry system. Therefore, we must look at the total costs under the present situation and compare it to the costs of a centralized facility operated professionally.

^{6/} Most of these 80 patients work half-days, therefore 80 x 1,040 hrs/yr x \$2.00/hr = \$166,400.

In order to fairly present the possible problems and disadvantages of a centralized laundry, the following items are discussed and analyzed.

- (A) The large investment in the equipment and the facility;
- (B) Labor and management problems;
- (C) Transportation equipment and delivery problems;
- (D) Central supply needs.

All these questions can be answered by analyzing the costs of this operation. Our figures are estimates, but reasonably accurate.

The estimated costs for the centralized laundry would be as follows:

Capital Cost:

Based on information recently supplied by the Architecture and Engineering Division of the Department of Administration, we estimate the capital cost to be \$1,468,000 for the laundry equipment and the building. Total machinery would cost \$700,000. Appendix 1 contains a list of laundry equipment which would have to be purchased for this highly automated system or a comparable system. The Architecture and Engineering Division calculates that approximately \$768,000 is needed to provide a facility which would adequately house the projected operation.

Labor Cost:

We estimate the labor costs as follows:

	<u>Number</u>	<u>Yearly Salary</u>	<u>Cost</u>
Workers	34	\$ 5,500	\$ 187,000
Manager	1	16,000	16,000
Assistant Manager	1	12,000	12,000
Engineer	1	12,000	<u>12,000</u>
			<u>\$ 227,000</u>

If a central laundry system were approved and a location needed to be selected, we suggest that the state select a well-populated community.

Traditionally, state institutions were founded in places where an adequate labor force does not exist. Few people wish to commute very far for a job which has a low take-home pay. Either Butte or Anaconda would be a better choice than Warm Springs or Boulder. The people who are presently employed by the laundries in these areas can either be trained to work in a new laundry facility or be absorbed into current unfilled positions at each institution.

Utilities:

Under current conditions, the laundries are not identified as separate cost centers. The utilities cost per year, for example, cannot be identified or estimated. However, according to information gained from the private sector, the more modern equipment uses less utilities than its predecessors, hence a reduction in costs.

Transportation Costs:

Transportation expenses will differ depending on the location of the central facility. We have outlined two possibilities for the sake of comparison only. Other variations are conceivable.

Example 1. Central facility located in Butte --

$\$.25 \text{ cost per mile} \times 10 \text{ (number of round trips to Boulder/week)} \times 52 \text{ weeks/year} \times 35 \text{ miles/trip} = \$4,550$

$\$.25 \text{ cost per mile} \times 10 \text{ (number of round trips to Warm Springs/week)} \times 52 \text{ weeks/year} \times 25 \text{ miles/trip} = \$3,250$

Trips to Boulder	\$ 4,550
Trips to Warm Springs	3,250
Truck Driver	<u>11,000</u>
Total Transportation Costs	<u>\$ 18,800</u>

Example 2. Central facility located in Anaconda --

$\$.25 \text{ cost per mile} \times 10 \text{ (number of round trips to Boulder/week)} \times 52 \text{ weeks/year} \times 55 \text{ miles/trip} = \$7,150$

$\$.25 \text{ cost per mile} \times 10 \text{ (number of round trips to Warm Springs/week)}$
 $\times 52 \text{ weeks/year} \times 10 \text{ miles/trip} = \$1,300$

Trips to Boulder	\$ 7,150
Trips to Warm Springs	1,300
Truck Driver	<u>11,000</u>
Total Transportation Costs	<u>\$19,450</u>

From these results, we can see that there is only a \$650 difference between the two options. This figure will significantly decrease as the number of trips per week decreases, once the operation is controlled and properly managed.

One other cost worth mentioning, but impossible to estimate at this time, is the number of people required to load and unload the truck. We realize that the central facility will have people available to unload the soiled laundry from the truck and load the clean laundry to be delivered. The soiled laundry loaded onto the truck at the institutions and the clean laundry received from the laundry could be handled by regular maintenance staff, who were accustomed to a timely pick-up and delivery schedule. This would neither eliminate nor create additional jobs at the institutions.

Central Supply:

A central supply station would be located within the new laundry facility. All supplies needed, such as detergents, bleaches, etc., would be stored in such an area. Also, all linen inventory records would be maintained here as well as dispersement and receivment schedules. Each institution could also retain its own central linen supply system and specify its linen needs to the central laundry facility. An estimated \$100,000 for increases in linen inventories is required due to the anticipated turnover time of soiled laundry. This increase in inventory is also necessary if laundry is contracted with the private sector.

Depreciation:

In accordance with generally accepted depreciation tables^{7/} for buildings and equipment, we have projected average lives for the following:

	<u>Estimated Life</u>	<u>Cost</u>	<u>Depreciation Amount/Year</u>
Building	40 years	\$ 768,000	\$ 19,200
Equipment	20 years	700,000	<u>35,000</u>
		Total - 1 year	<u>\$ 54,200</u>

A side-by-side comparison of these facts is needed to select the most efficient and least costly system for the state. We assume that costs such as soap supplies, utilities, insurances, etc., will increase the cost per pound but is minor in importance. Therefore, they have been eliminated from this example in comparing per pound costs from the major comparable categories.

	<u>Fragmented Approach</u>	<u>Consolidated Approach</u>
Labor Costs	\$ 306,000 ¹	\$ 227,000 ²
Transportation	- 0 -	19,125
Depreciation	<u>35,000³</u>	<u>54,200</u>
Total	<u>\$ 341,000⁴</u>	<u>\$ 300,325</u>

1 - based on 51 paid employees and not including at least 80 unpaid patients.

2 - based on a total of 37 employees, including the management.

3 - calculated by dividing estimated \$700,000 in future equipment replacement by 20-year life.

4 - a figure which appears low until considering an additional \$166,400 for patient help.

It is evident from the above example that the consolidated would cost less than the fragmented approach even without considering patient labor costs.

Contracted Services:

The private sector has provided us with an estimate of 10 to 12 cents per pound to do institutional laundry. The estimates were made on the data

^{7/} Schedules by the Marshall Valuation Service, used nationally by architects.

provided by the Department of Institutions and utilized in drafting our report. It is important to note that the estimates provided by the private sector do not include the costs of transportation, which would be paid for by the state. An increase in linen inventories would be necessary under this option also.

Including estimated power and supplies costs, the consolidated approach would cost approximately 8 cents per pound as compared below with the costs per pound if contracted out to the private sector.

Consolidated Approach

<u>Expense Item</u>	<u>Amount</u>	<u>Cost per pound</u>
Labor	\$ 227,000	\$.0378
Transportation	19,125	.0031
Depreciation	54,200	.0090
Utilities (est.)	-	.0150
Supplies	-	.0150
Total		<u>\$.0799</u>

The impact of this considerable difference in per pound costs can be seen in this example:

Contract Services
 6,000,000 lbs x 11 cents/lb (average) = \$660,000/yr

Consolidated Approach
 6,000,000 lbs x 8 cents/lb = \$480,000/yr

Note the difference of \$180,000 per year.

We have reconstructed and combined the alternatives and cost estimations on the following page.

NO.	APPROACH	DEPRECIATION	LABOR	UTILITIES AND SUPPLIES	TOTAL ANNUAL	REMARKS	
1	Do Nothing						Unless action is taken the laundries will fail to meet Medicaid/Medicare standards. This will result in a loss of \$2,000,000 to \$3,000,000 a year to the State.
2	Fragmented Approach	35,000	306,000 ^{1/}	<u>2/</u>		341,000	The net result of this approach was a continuation of inefficiency.
3	Consolidated Approach	54,200	227,000 ^{3/}	<u>2/</u>	19,125	300,325 ^{4/}	
4	Contract					660,000 ^{5/}	The private sector estimates costs of 10 to 12 cents per pound if contracted for services.

NOTES:

1/ Labor costs are grossly understated. This cost is based on 51 paid employees and doesn't include the contribution of 80 unpaid patients. If the Department of Labor requires payment to patients, labor costs of the Fragmented Approach will almost double. It is highly probable that the Department of Labor will require this.

2/ Not estimated. However, the Consolidated Approach should be more efficient in the utilization of utilities.

3/ Employees displaced by the centralized laundry will be given re-employment rights.

4/ Does not include power or supply costs.

5/ Calculated at 11 cents per pound x 6,000,000 pounds per year. Also, does not include transportation costs.

SECTION FOUR
RECOMMENDATIONS

In this report, the Government Operations Unit has attempted to provide accurate facts and figures. In some cases, we can only estimate what costs the state would bear and we have noted these estimations throughout this report. There are background references to support the findings and recommendations as well as material which was not included for the sake of brevity and simplicity. The Government Operations Unit staff is available to discuss this report and related information at any time.

We have cooperated with the private sector^{8/} and utilized its cost estimates wherever possible. We have worked closely with the Architecture and Engineering Division of the Department of Administration. Employees of that division have reviewed the proposed equipment lists and construction costs and concluded that these are accurate and reasonable for a highly automated system.

RECOMMENDATION

The Government Operations Unit recommends that the state build and staff a central laundry facility for the reasons discussed in this report.

^{8/}We cooperated with and received input from the following representatives of the private sector: The National Laundry Company, The International Fabricare Institute, The American Laundry Machinery Company, and The Troy Laundry Machinery Company. We also contacted numerous other laundries of the private sector to obtain cost comparison data.

RECOMMENDATION

Should either the Warm Springs or Boulder laundries be forced to close within the two-year period that it would take to construct a laundry, we recommend that the Department of Institutions contract the laundry (on a short-term basis only) to one of the private laundries in the state until a central facility is available.

Some of the areas in which we suggest change in order to promote an efficient operation are the following:

A. Limited Service - The laundry should not perform any personal services for institution employees. This practice increases laundry costs because personal service loads are small and cause inefficient utilization of the large-scale machines. The separate institutions should encourage private concerns to establish small coin-operated laundromats on the grounds. This would provide the employees, as well as patients who wish to give their own clothing their personal attention, with a place to do so.

B. Reduce Ironing - Warm Springs patients will wear increasing amounts of permanent press clothing. Cotton materials will not be available in the near future. Institutional laundries must plan to handle the "miracle" fabrics that have taken over the market.

C. Professional Workers - The centralized laundry will be staffed by paid employees, according to the recommendations of the laundry equipment manufacturers. Laundry equipment is highly sophisticated and expensive. Since this laundry would be located somewhere other than on institution

property, patients will not be working in the facility. Industrial therapy professionals at the institutions have given assurances that patients would be placed in other duties on the grounds.

D. Separate Cost Center - The laundry should not be part of any institution. It should be a separate cost center and should be managed in the same fashion as a professional laundry. The laundry should also have a professional manager. The cost center responsibility of the laundry manager will promote a suitable maintenance program including a preventive maintenance program. The manager's performance should be constantly compared to local commercial laundries on a "cost-per-pound for similar articles" basis. The laundry should be located in an area which has a suitable labor supply, which could easily staff the two larger institutions, Boulder and Warm Springs.

Appendix 1

FEASIBILITY STUDY FOR CENTRALIZED LAUNDRY SYSTEM

November 7, 1973

Estimated yearly poundage -- 6,000,000 lbs.

6,000,000 lbs. $\div$ 52 weeks = 115,384 lbs. per week approximately
115,384 lbs. per week $\div$ 5 days = 23,077 lbs. per day approximately
23,077 lbs. daily $\div$ 8 hours = 2,885 lbs. per hr. approximately

Based on minimum hourly production of 2,885 lbs. per hour we would recommend the following system.

- 1 American 400 lb. S/L W/E
- 10 American Slant Line Washers 200 lbs. per load - 12 loads per day minimum
- 2 American Jumbo Shike Extractor - 10 loads per hour - minimum
- 1 65 lb. American Cascader W/E
- 2 100 lb. Hueboch Unloading dryer or 100 lb. Am. Thermabac Dryer
- 2 400 lb. Conditioning and Drying Tumblers
- 1 Grancham Small Piece Folder
- 1 8 Roll Am. Hypra Ironer & Canopy with spec. range 30 - 174 FPM
- 1 3 Sta Trufold Sheet Folder
- 1 American Combo Folder 2/L Primary S/L Cross folder
with 3 Fold Module
- 1 American las Stack Stacker for combo
- 1 American 6 roll Hypra Ironer & Canopy with Speed Range 25 - 150 FPM
- 1 American 4 Lane Folder Trumatic
- 2 Grancham Patty Cake Folders
- 1 Am Formatic Wet Cabinet System Finisher WSF 6 Supporting Equipment
- 3 Wetherbee Line Collectors
- 1 California Blow Pipe System - Loading Washers
- 1 American Liquid Central Supply System to handle 10 S/L Washers
4-1, 3-1, 2-1, 1-1 (4 cardomatic controls)
- 2 Wet Belt Conveyor Systems for U/L Washers to automatic Shike Extractors
- 2 Conveyors Extractors to Bumble Conveyor
- 1 Tumbler Conveyor
- 1 White Conveyor System for Garment from Wet System Finisher
- 1 7 Lane Sorter if necessary (may not be necessary)
- 3 Supplemental Conveyors for Towel Folders and finishers F.W. etc.

